



CLEAN WATER ACT, 2006

Technical Bulletin: Delineation of Vulnerable Areas Crossing Jurisdictional Boundaries

September, 2010

The *Clean Water Act, 2006* (CWA) requires each Source Protection Committee (SPC) to prepare an assessment report for each source protection area they represent, in accordance with regulations, the [Director's Technical Rules](#) and the approved terms of reference for that source protection area.

As part of the assessment report, SPCs must identify four types of vulnerable areas within each source protection area. These are wellhead protection areas (WHPAs), intake protection zones (IPZs), highly vulnerable aquifers (HVAs) and significant groundwater recharge areas (SGRAs). Once these areas are delineated, the [Director's Technical Rules](#) require that vulnerability scores be assigned to these areas.

Natural boundaries, such as watersheds and groundwater flow, may not align with political boundaries. This means that the delineation of vulnerable areas may cross municipal, provincial and even national boundaries. Significant drinking water threats may be identified in areas beyond the jurisdiction of the source protection plan.

Presently, there is no binding legislation between Ontario and neighbouring provinces or states that would require cooperation for the purposes of drinking water source protection. The responsibility for managing the risks to drinking water in the vulnerable area will fall on the municipality where the vulnerable area is located, which may be different from where the well or intake is located.

In the absence of legislative or regulatory requirements, this technical bulletin provides some information and practices to assist in developing an effective approach to source protection planning across boundaries.

Protecting our environment.



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Complementary water legislation to the CWA in neighbouring jurisdictions:

Within Canada:

- Quebec's [Water Policy](#) – integrated watershed management
- Quebec's [Groundwater Catchment Regulation](#) under the [Environmental Quality Act](#) – drinking water source protection
- Manitoba's [Public Health Act](#) - specifically Regulation 330/88 (Water Supplies)

Canada-US:

- [The Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement \(Agreement\) AND The Great Lakes-St. Lawrence River Basin Water Resources Compact \(Compact\)](#): a binding agreement between the 8 Great Lakes states, Quebec and Ontario; detailing how the states and provinces will manage

and protect the Great Lakes—St. Lawrence River Basin and provides a framework for each state and province to enact laws protecting the Basin.

- *International Boundary Water Treaty* - Bilateral agreement between the United States and Canada that establishes the [International Joint Commission](#) and provides a mechanism to help resolve and mitigate disputes and prevent future disputes.
- Amendment to *US Safe Drinking Water Act, 1974 and 1996* (Section 132) and 1986 (section 1428). Each state under the [EPA Safe Drinking Water Act](#) has to implement drinking water protection measures.
- State drinking water programs mandated under the *EPA Safe Drinking Water Act* include source water delineations, assessments and protection.
 - New York State [Drinking Water Protection Program](#)
 - Michigan State [Drinking Water Protection Program](#)

Best practices for SPCs and Conservation Authorities to create effective relationships with neighbouring jurisdictions:

- Communicate and build relationships with other SPCs, municipalities and equivalent authorities across provincial and international borders. Many of the bordering provinces and states have agencies and/or committees that may be willing to work with the SPCs and potentially create collaborative protocols for drinking water source protection.
- Share information and keep communication open whenever possible. This will enable coordination with other organizations to prevent duplication of research and work. This strategy may help SPCs and neighbouring authorities leverage the range of resources that are available.

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- Research current drinking water protection programs in bordering municipalities, SPAs, provinces and states. Taking into account complementary activities across boundaries, it may be possible to share resources and information to eliminate or minimize a shared significant threat.
- Work at the local level, adopting grassroots approaches to cross-boundary communication and relationship building.
- Across provincial and national boundaries, raise awareness about Ontario's Source Protection Program. Educating people that are within vulnerable areas can potentially influence local governments to get involved and collaborate with the SPCs to minimize shared threats to drinking water.
- Ensure that formal notification of the delineation of vulnerable areas and significant drinking water threats is given to cross-border government agencies and interested organizations within a reasonable timeframe. This strategy has the potential to build relationships needed to work together to lessen the risk.
- Build relationships with private and corporate parties to potentially increase voluntary cooperation, and enhance program recognition.
- Delineate the vulnerable areas in accordance with the [Director's Technical Rules](#) under the CWA and list the known threats, issues, Lakewide Management Plan (LAMP) information and any other publicly available documents.

How to address provincial and international boundaries in the assessment report and source protection plan:

Assessment Report:

- Initially, all vulnerable areas should be delineated and scored according to the [Director's Technical Rules](#). If it is apparent that a vulnerable area may extend beyond the boundary of the source protection area into another jurisdiction, an SPC should use available data to inform the delineation of the vulnerable area outside of their jurisdiction.
- If there is not enough data available to give the SPC the confidence to complete the delineation of a vulnerable area, the SPC should engage neighbouring jurisdictions to assist them with the delineation, using the best practices outlined above. The SPC should keep in mind that they only have the ability to write and enforce policies within their own source protection area.
- Vulnerability scores are assigned based on all factors prescribed in the [Director's Technical Rules](#). The evaluation of these factors should be done for the entire area of each vulnerable area.
- The minimum information for an assessment report includes vulnerable

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area delineation and vulnerability score maps within the source protection area. It may be helpful for the SPC to include maps of the full delineation of vulnerable areas, including within and beyond provincial and international boundaries, using shading or cross-hatching to indicate the portions of the vulnerable area that lie outside of their source protection area.

Source Protection Plan:

- Source protection plans and policies that address drinking water threats in vulnerable areas are limited to the boundaries of a source protection area.
- If the delineation maps for vulnerable areas show an extension beyond the international or provincial border, the source protection plan should clarify that its policies do not apply to those areas that are outside a source protection area.

For further Information about the *Clean Water Act, 2006* visit the Ministry of Environment web site at: www.ontario.ca/cleanwater or contact,

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